

## Utah Weekly Pertussis Update

2017 data, through MMWR week ending December 16, 2017 (MMWR week 50)

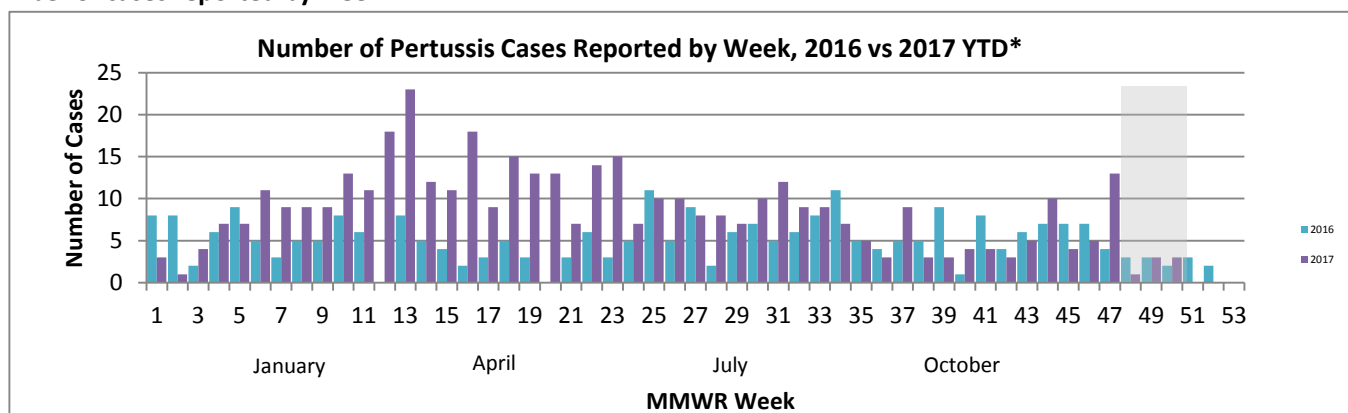
Data presented in this report are based on current data available and will be subject to change weekly.

### Data Summary

Total number of cases reported, 2017 year-to-date (YTD)	427	Utah Incidence rate, 2017 year-to-date (YTD) per 100,000 person-years	14.9
Total number of cases reported 2016	267	Utah Incidence rate, 2016 per 100,000 person-years	9.1
Number of cases reported in past week	3	National Incidence rate*, 2015 per 100,000 person-years.	5.7
Total number of cases reported, through same time period 2016	262	2017 Hospitalizations	17
Age groups with the highest rates	<1	2017 Cases in infants <1 year	37
	1-4		

\*National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

### Number of cases reported by week



\*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

### 2017 Year-to-Date Incidence Rates, By Age

Age (years)	2017 Cases	2015 population	Rate*
<1	37	50,821	75.9
1-4	57	199,882	29.7
5-14	107	516,820	21.6
15-24	99	485,295	21.3
25-34	24	441,518	5.7
35-44	34	399,342	8.9
45-54	22	309,941	7.4
55-64	18	284,433	6.6
65+	24	307,867	8.1
Unknown	5	-	-
Total	427	2,995,919	14.9

\* Rate is calculated per 100,000 person years.

Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

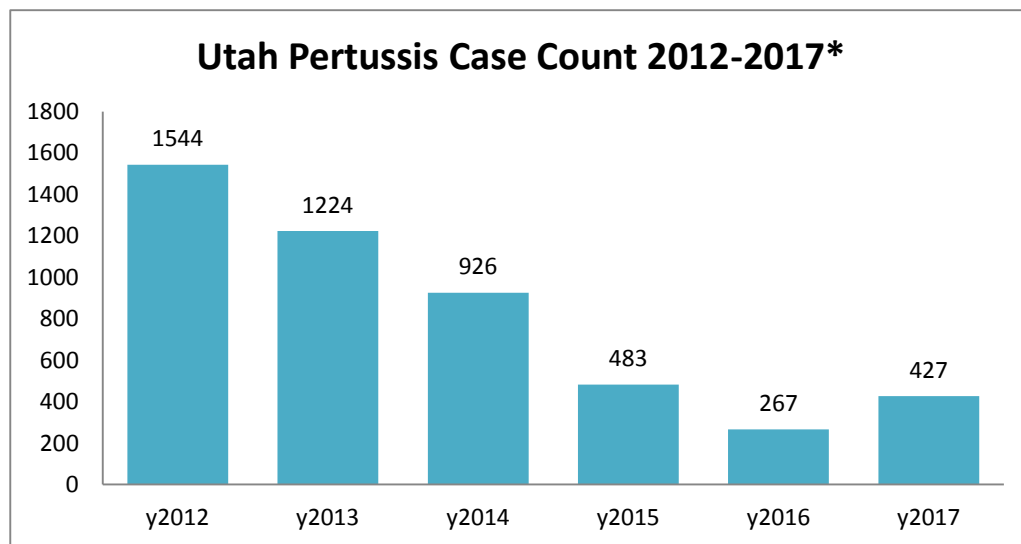
### School Age Incidence Rates, 2017 Year-to-Date

Grade	Age (years)	2017 Cases	2015 Population	Rate*
Preschool	3-4	21	99,213	22.1
Kindergarten	5	9	52,218	18.0
1	6	6	52,501	11.9
2	7	8	53,394	15.6
3	8	7	53,225	13.7
4	9	11	52,275	21.9
5	10	7	52,118	14.0
6	11	12	51,405	24.3
7	12	8	50,993	16.4
8	13	13	49,184	27.6
9	14	21	49,507	44.2
10	15	11	49,530	23.2
11	16	21	47,991	45.6
12	17	22	47,452	48.3

\* Rate is calculated per 100,000 person-years. School age incidence rates were calculated using the average age of a student in each grade.

High incidence rates in 5th and 6th grade may be due to waning immunity.

### Utah Case Counts of Pertussis, 2012-2017\* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward.

\* 2017 data includes pertussis cases reported year to date. 2012-2016 data reflects cases reported during the entire calendar year for each year.

## Incidence of pertussis by Local Health Department, 2017 YTD

Local Health Department	2017 Cases	Rate*
Bear River	5	3.0
Central Utah	13	17.6
Davis County	34	10.6
Salt Lake County	262	24.7
San Juan County	0	0.0
Southeast Utah	0	0.0
Southwest Utah	3	1.4
Summit County	2	5.3
Tooele County	0	0.0
TriCounty	2	3.5
Utah County	49	8.9
Wasatch County	1	3.6
Weber-Morgan	56	22.9

\* Rate is calculated per 100,000 person-years using 2015 Utah population estimates.

